



Development of a Suicide Care Clinical Pathway in a Pediatric Healthcare Setting

Stephen L. Soffer, PhD

Jason Lewis, PhD

Yesenia Marroquin, PhD

O’Nisha Lawrence, MD



State of Colorado
Office of Suicide Prevention
Learning Collaborative – October 28, 2021

Disclosure of financial conflicts of interest

- Drs. Soffer, Lewis, Marroquin, and Lawrence receive funding from the Cardinal Health Foundation to support suicide prevention quality improvement activities.

Meet the Team – CHOP Zero Suicide Program

DCAPBS

- Steve Soffer, PhD
- Jason Lewis, PhD
- O’Nisha Lawrence, MD
- Yesenia Marroquin, PhD

Pediatrics

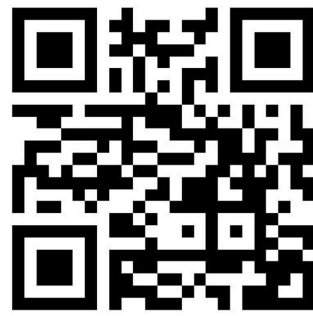
- Jeremy Esposito, MD
- Stephanie Doupnik, MD

Social Work

- Karen White, LCSW

Zero Suicide

<https://zerosuicide.edc.org/>



Aspirational challenge and commitment to suicide prevention in health care systems

Provides a framework for organizing and maintaining suicide prevention initiatives

Collection of tools, strategies, and technical support to improve suicide risk assessment, suicide prevention, and treatment

Zero Suicide at CHOP



Lead: Attended ZS Academy in 2015, obtained commitment of DCAPBS and CHOP leadership

Train: Over 450 CHOP clinicians trained via lectures, webinars, and e-learning modules

Identify: Standardized suicide assessment using C-SSRS in DCAPBS in 2016, now standardizing screening in DCAPBS and non-BH settings

Engage: Suicide pathway of care in 2019, Depression pathway in 2020

Improve: C-SSRS Dashboard for data, Healthy Planet Population Tool

Clinical Pathway Development



The case for standardization

- **Variations in health care delivery** often impacts quality
- Variations exist for many reasons, including
 - Increased volume of new medical knowledge and evidence
 - Growing complexity of patient conditions and treatments
 - Individual clinicians have their own practice styles

The case for clinical pathways

- **Clinical practice guidelines ideally are:**
 - Clear statements of recommendations regarding treatment
 - Informed by a systematic review of evidence
 - Inclusive of pros and cons of different treatment options
- **Clinical practice guidelines can have limitations**
 - Lengthy and extremely high level
 - Lack detail of specific situations
 - Lack information to support implementation
- **Clinical pathways convert these guidelines into explicit action**

Pathways: A New Opportunity

A way to achieve this new model, narrowing the gap between evidence and practice and eliminating variations in healthcare delivery



What are clinical pathways?

Structured multidisciplinary plans of care that translate guidelines, evidence, and expert consensus opinion into localized infrastructure and processes

Provide guidance on the evaluation and management of given chief complaints, diagnoses, or clinical processes that can be applied across the continuum

Aim to standardize care for a specific clinical problem, process, procedure, or episode in a defined population, such that variation resulting from specific patient characteristics is preserved whereas variation from the provider is eliminated

Benefits of Clinical Pathways

Standard process results in meaningful measurement of outcomes

Improve organizational efficiency, clinical effectiveness, care coordination

Optimizes resource utilization, improves values/outcomes

Supports training and education

Outpatient Specialty Care Clinical Pathway for Children and Adolescents At Risk for Suicide

<https://www.chop.edu/clinical-pathway/suicide-risk-assessment-and-care-planning-clinical-pathway>



Suicide Care Pathway - Goals

Increasing reliability of identification of suicidal ideation and behavior.

Providing guidance to clinicians in completing a full suicide risk assessment that integrates information about suicidal ideation, behavior, and risk/protective factors.

Standardizing care practices & Improving outcomes

Using integrated assessment data to determine risk formulation and treatment plan considerations (immediate and long term).

Supporting enhanced communication across care team members about patients' suicide risk status and care needs.

Outpatient Behavioral Health Care Clinical Pathway for Assessment and Care Planning for Children and Adolescents at Risk for Suicide

[Goals and Metrics](#)

[Patient Education](#)

[Provider Resources](#)

Related Pathway

[Behavioral Health Issues, ED Depression, Outpatient Behavioral Health and Primary Care](#)

[Patient with Possible Suicide Risk](#)

[Screen for Suicide Risk](#)

Positive Suicide Screen/New Patient Evaluation

Use the [Columbia Suicide Severity Rating Scale](#) to complete Suicide Risk Assessment
Assess for chronic and current [Risk and Protective Factors](#)

Definitions

[Suicidal Ideations, Behaviors, Non-suicidal Injury](#)

Negative Suicide Screen

[Screen for Suicide Risk](#) at subsequent patient care encounters.
Engage and/or continue treatment plan on primary presenting symptoms and problems.

Negative Suicide Risk Assessment

Complete [Risk Formulation](#).
Engage and/or continue treatment plan on primary presenting symptoms and problems.
[Screen for Suicide Risk](#) at subsequent patient care encounters.

Low Acuity

Suicidal Ideation

At least 1 of the following:

Within the past 1 month:

[Wish to Be Dead](#)

More than 1 month ago:

[Non-specific Active Suicidal Thoughts](#)

[Active Suicidal Ideation with Any Methods \(Not Plan\) without Intent to Act](#)

Within past 3 months:

[Non-suicidal Self-injurious Behavior](#)

And

Suicidal Behavior

No History of [Suicidal Behavior](#)

Intermediate Acuity

Suicidal Ideation

At least 1 of the following:

Within the past 1 month:

[Non-specific Active Suicidal Thoughts](#)

[Active Suicidal Ideation with Any Methods \(Not Plan\) without Intent to Act](#)

More than 1 month ago:

[Active Suicidal Ideation with Some Intent to Act, without Specific Plan](#)

[Active Suicidal Ideation with Specific Plan and Intent](#)

And/or

Suicidal Behavior

More than 3 months ago:

[Suicidal Behavior](#)

High Acuity

Suicidal Ideation

At least 1 of the following:

Within the past 1 month:

[Active Suicidal Ideation with Some Intent to Act, without Specific Plan](#)

[Active Suicidal Ideation with Specific Plan and Intent](#)

And/or

Suicidal Behavior

Within the past 3 months:

[Suicidal Behavior](#)

Evidence

[Assessment and Management of Suicide Risk in Children and Adolescents](#)

[Safety Planning Intervention: A Brief Intervention to Mitigate Suicide Risk](#)

[The Columbia–Suicide Severity Rating Scale: Initial Validity and Internal Consistency Findings From Three Multisite Studies With Adolescents and Adults](#)

Community Resource

[Columbia Suicide Severity Rating Scale](#)

[Joint Commission Sentinel Event Alert](#)

[Therapeutic Risk Management – Risk Stratification Table](#)

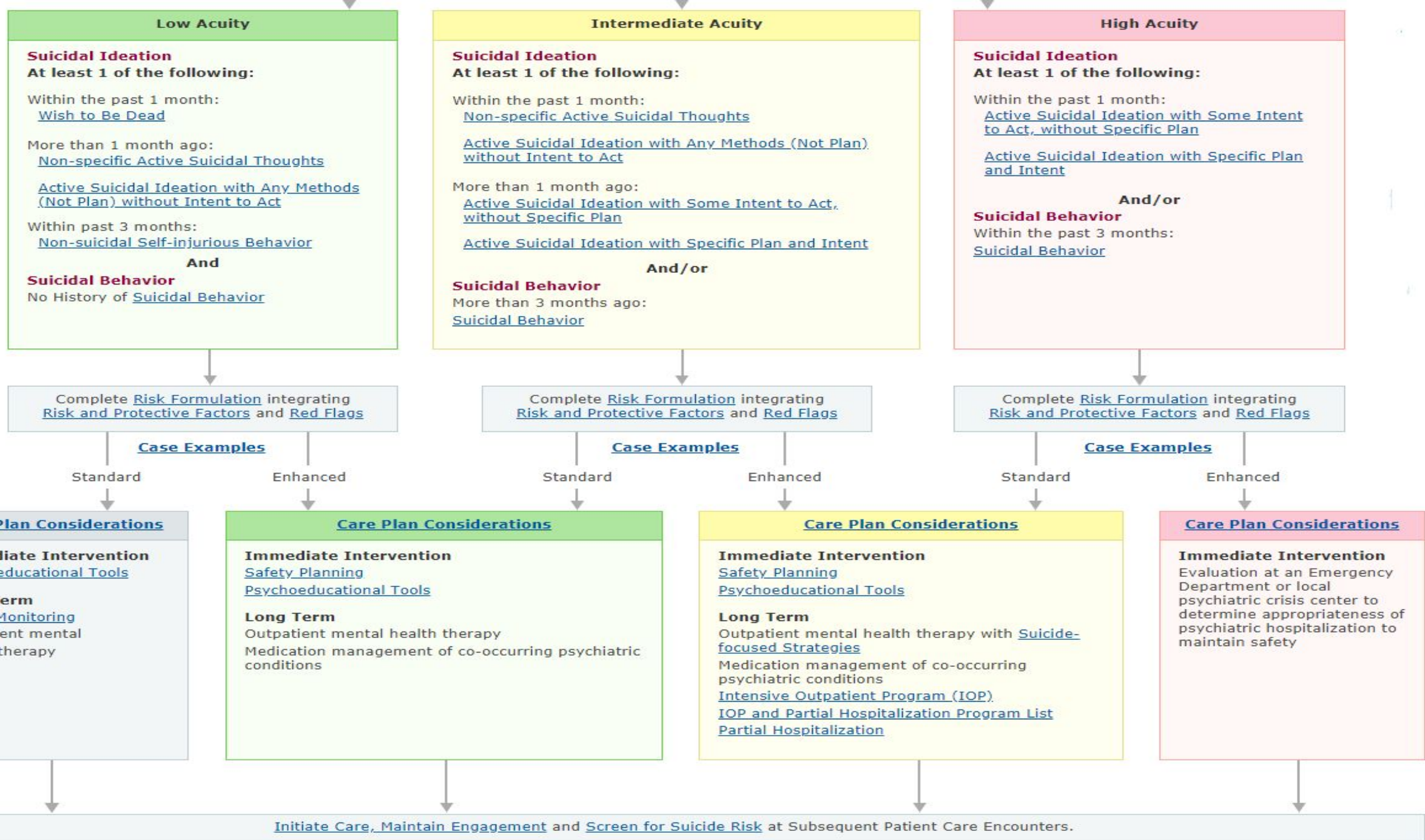
[IOP and Partial Program Resource List](#)

[How to Apply for Medical Assistance in PA or NJ](#)

CHOP Programs

[Child and Adolescent Psychiatry and Behavioral Sciences](#)








[Youth Suicide Prevention, Intervention and Research Center](#)



Resources & Definitions

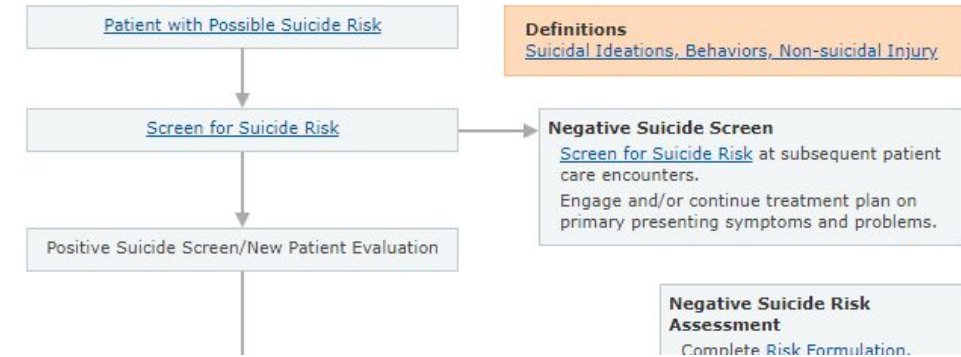
Suicide Risk Assessment and Care Planning Clinical Pathway — Outpatient Specialty Care

Patient Education

- [Child Abuse and Suicide](#)  
- [Depression in Children and Teens](#) 
- [Firearms and Children](#) 
- [LGBTQ Youth and Suicide](#)
- [Self-injury in Adolescents](#) 
- [Suicide in Children and Teens](#) 
- [Talking to Your Kids about Suicide](#) 

- [Goals and Metrics](#)
- [Patient Education](#)
- [Provider Resources](#)
- Related Pathway**
[Behavioral Health Issues, ED Depression, Outpatient Behavioral Health and Primary Care](#)

Outpatient Specialty Care Clinical Pathway for Children and Adolescents At Risk for Suicide



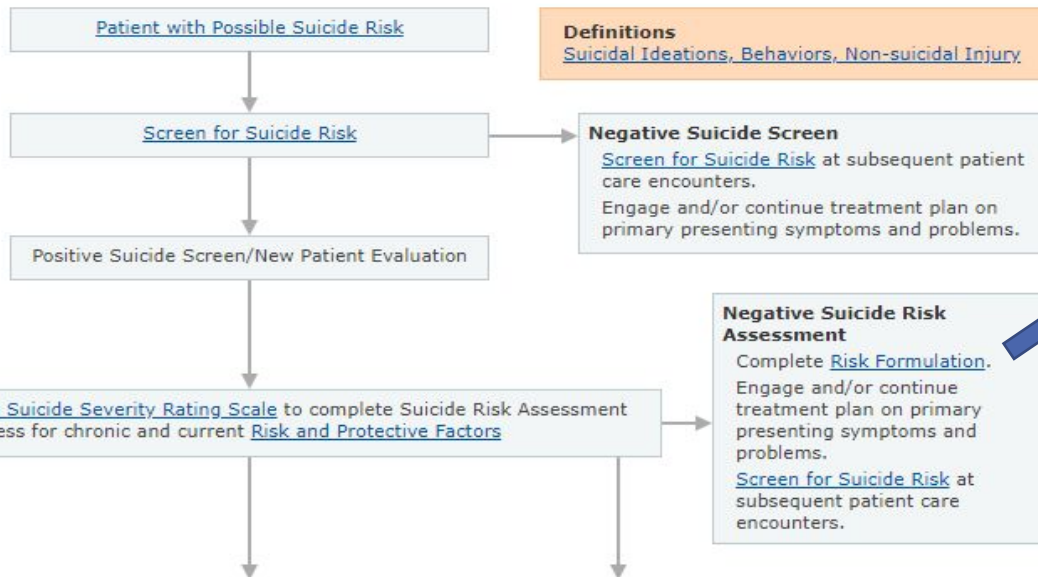
Risk Formulation

The process of **risk formulation** supports clinical decision-making and development of a plan to respond to acute and chronic suicide risk. Risk formulation is an examination of an individual's history and current presence of suicidal ideation and behavior; as well as their unique combination of risk factors and protective factors, to inform the clinician about the level, extent and imminence of risk. This, in turn, informs understanding of steps needed to reduce risk and increase safety. The goal of risk formulation is to integrate all sources of information that contribute to an understanding of the patient's acute and chronic risk, resulting in a collaborative treatment plan. A well-documented risk formulation can demonstrate that clinical decisions took into consideration the full range of factors; it can also aid in communication with the child, other clinical staff, and important people in the child's life.

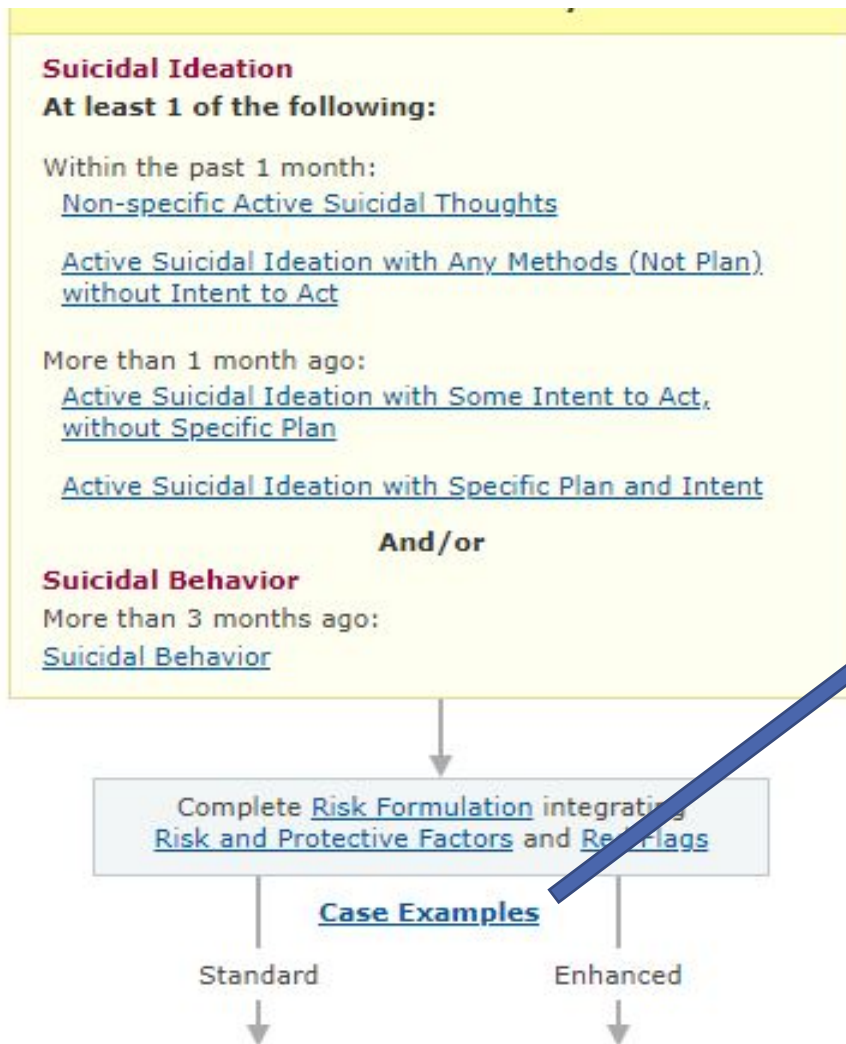
The risk formulation may make it apparent that a patient would benefit from enhanced interventions and increased support, particularly in the presence of "red flags," significant worsening in clinical presentation, poor response to treatment interventions, or risk factors that seem to outweigh the patient's and/or family's ability to ensure safety.

Examples of factors that may influence a risk formulation and result in enhanced care (please note, factors identified below may not be applicable at all levels of risk):

1. Patient and/or family is unable to:
 - a. Maintain safety in their environment
 - b. Engage in and follow treatment plan recommendations
 - c. Identify and use coping strategies
 - d. Initiate and follow the steps of a safety plan
2. Presence of "red flags" such as:
 - a. Sudden change in acuity of suicidal ideation
 - b. Escalation in severity or intensity of self-injurious behaviors
 - c. Increase in reckless or risk-taking behavior (e.g. increased alcohol and/or drug use)
 - d. Significant decline in patient's mental state
 - e. Dramatic changes in mood; or significant worsening in patient's presentation
 - f. Homicidal ideation and/or threat to others



Case Examples



Case Example (Intermediate Acuity)

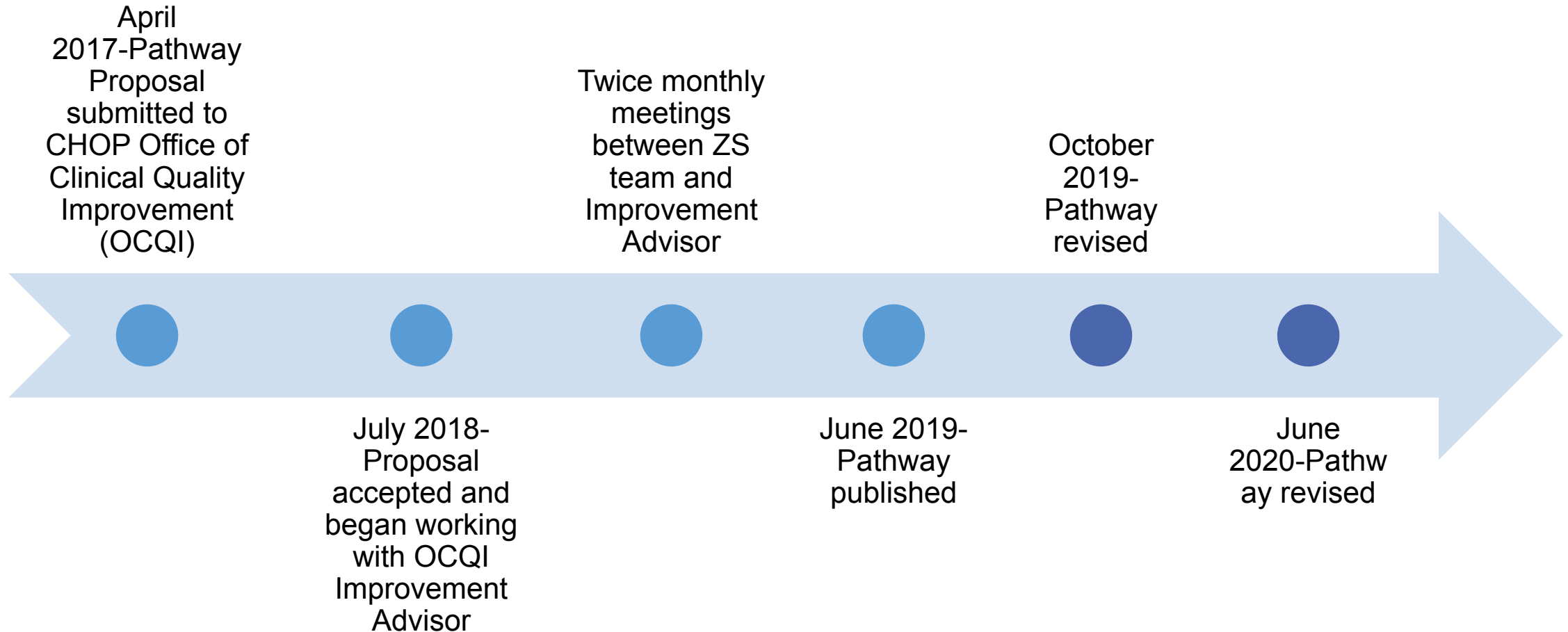
Tommy and Brandon are 16-year-old males who receive outpatient mental health treatment for depression. During today's individual appointments, Tommy and Brandon both reveal suicidal ideation with method within the last month, placing them both at intermediate acuity based on their suicide risk assessment using the C-SSRS.





Pathway Development

Pathway Development- Timeline



<https://www.chop.edu/clinical-pathway/suicide-risk-assessment-and-care-planning-clinical-pathway>

Pathway Development- Benchmarking of Existing Pathways and Care Management Plans

Rocky Mountain
MIRECC-
Therapeutic Risk
Management,
Risk Stratification
Table

- High, Intermediate, Low Risk; Acute vs Chronic Risk

Centerstone of
Tennessee

Institute for
Family Health

Marsha Linehan's
Risk Assessment
and Management
Protocol

Key Takeaway- A scarcity of clinical pathways directed at youth at risk for suicide

Pathway Development – Scope

- Scope – outpatient behavioral health patients
 - Balance targeting important patient population with feasibility
- Target population:
 - Patients with behavioral or emotional concerns, or screening positive on a depression questionnaire (e.g., PHQ-9)
 - Patients with chronic or acute medical illness
 - Patients who have had a decline in overall clinical/behavioral/emotional functioning
 - Patients with recent suicidal ideation or behavior
 - Age 6 and older

Pathway Development - Definitions

- Suicidal ideation, behavior and NSSI
 - Used definitions from Columbia Suicide Severity Rating Scale (C-SSRS)
- Suicide screening and assessment
- Risk and protective factors
 - Including “red flags” that may indicate elevated acuity/risk
- Risk formulation
- Multiple intervention approaches (such as safety planning, active monitoring, suicide-focused intervention strategies)



Suicide Risk Assessment and Care Planning Clinical Pathway — Outpatient Specialty Care

Red Flags

Red flags are factors that should prompt the clinician to consider enhancing the intervention plan to include a greater level of support and responsiveness. Red flags may indicate more acute or imminent risk, and should be considered along with a patient's unique presentation of risk and protective factors.

1. Unwillingness or inability to:
 - Maintain safety independent of external support
 - Engage in safety planning and/or identify and use appropriate coping strategies
2. Sudden onset of:
 - Current suicidal ideation
 - Escalation in severity or intensity of self-injurious behaviors
 - Increase in reckless or risk-taking behavior (e.g., increased alcohol and/or drug use)
 - Significant decline in patient mental state
 - Dramatic changes in mood; or significant worsening in patient presentation
 - Homicidal ideation and/or threat to others

Pathway Development – Acuity Levels

- Identified 3 acuity levels:
 - Differentiate patients by degree of need
 - Match patient acuity with treatment intensity
- Based on C-SSRS definitions of suicidal ideation and behavior

Low Acuity
Suicidal Ideation At least 1 of the following: Within the past 1 month: Wish to Be Dead More than 1 month ago: Non-specific Active Suicidal Thoughts Active Suicidal Ideation with Any Methods (Not Plan) without Intent to Act Within past 3 months: Non-suicidal Self-injurious Behavior And Suicidal Behavior No History of Suicidal Behavior

Intermediate Acuity
Suicidal Ideation At least 1 of the following: Within the past 1 month: Non-specific Active Suicidal Thoughts Active Suicidal Ideation with Any Methods (Not Plan) without Intent to Act More than 1 month ago: Active Suicidal Ideation with Some Intent to Act, without Specific Plan Active Suicidal Ideation with Specific Plan and Intent And/or Suicidal Behavior More than 3 months ago: Suicidal Behavior

High Acuity
Suicidal Ideation At least 1 of the following: Within the past 1 month: Active Suicidal Ideation with Some Intent to Act, without Specific Plan Active Suicidal Ideation with Specific Plan and Intent And/or Suicidal Behavior Within the past 3 months: Suicidal Behavior

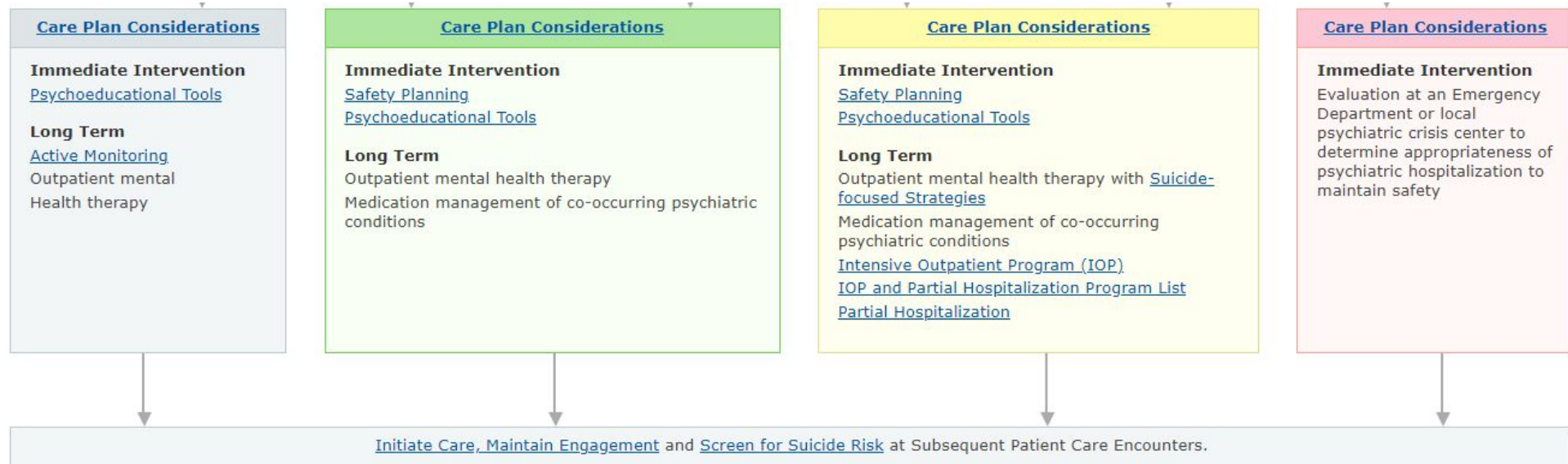
Pathway Development – Risk Formulation

- Definition of risk formulation and guidance on process
- Identified goal: integrate all sources of information to understand acute and chronic risk and develop care plan
- Integration of “red flags”
 - Patient/family factors preventing engagement in care
 - Factors indicating escalating acuity
 - Presence may indicate enhanced care plan considerations



Pathway Development – Care Plan Considerations

- Care plan considerations organized to match acuity
 - Organized by immediate and long-term considerations
- Standard care recommendations:
 - **Low acuity** - psychoeducation and active monitoring
 - **Intermediate acuity** – safety planning and BH therapy/medication
 - **High acuity** – safety planning, suicide-focused care, intensive treatment settings (IOP, PHP)
 - High acuity (enhanced) – crisis evaluation for inpatient care



Suicide Care Pathway - Impact

- Website traffic:
 - July 2019 – Aug 2021:
 - 12,433 unique page views, 5,643 unique users
 - US and international interest – views from Canada, Australia, UK, Hong Kong, Austria
- Included in the *Zero Suicide Toolkit* (Engage resource)
- Training/teaching:
 - BH trainees
 - Pediatric primary care physicians
 - Specialty care programs
 - Grand Rounds (CHOP & other institutions)

Pathway Development - Lessons Learned

Timeline

- Submission to online publication - approximately 2 years

Multidisciplinary team essential

- Ensuring components of pathway are relevant across care settings

Project management support

- Establishing clear goals, engaging collaborators, and maintaining timeline

Web Design Team

- Aided in presenting pathway in a streamlined way

Communication

- Multiple “road show” sessions for education across department

Next Steps

- Fostering relationships with other healthcare organizations that are engaged in similar work
- Revising the Suicide Care Pathway
 - Living document
- Adapting care pathway for other care settings
 - Primary care, emergency department, medical specialty care
- Embedding the Suicide Care Pathway in EHR
 - “Just in time” clinician support
 - Identifying high risk patients
 - Clinical decision-making support

Healthy Planet – EHR Pathway Implementation

- **Epic Healthy Planet**

- Using population-level data to monitor patients
- Includes the following tools:
 - Automated Epic patient registries, which are built with algorithms to find patients based on diagnoses, utilization, and other factors
 - Real-time Epic reports to be used by clinical and administrative staff for care coordination and proactive outreach
 - Dashboards to track improvement on quality metrics over time

Healthy Planet - Goals

- **Patient Care:** Develop and implement a process for identifying high risk patients on the Suicide Pathway, in order to ensure that these patients are:
 - Provided the appropriate treatment intensity to address their level of acuity/clinical need.
 - Closely monitored to ensure they are attending appointments and completing necessary lab work, and
 - Proactively identifying when these patients may require a higher level of care in order to prevent the occurrence of a psychiatric emergency.
- **Clinical Leaders:** Develop a better understanding of the level of acuity of across clinician caseloads and patient populations of different programs/sections.
 - Support decision making regarding staffing, clinician caseloads, program development

CHOP ZERO SUICIDE PROGRAM

Stephen Soffer, PhD

O'Nisha Lawrence, MD

Jason Lewis, PhD

Yesenia Marroquin, PhD

Stephanie Doupnik, MD

Jeremy Esposito, MD

Executive Sponsor – Tami Benton, MD

